

## **Section V**

# **Phased Preservation Recommendations**

## SECTION V – PRESERVATION RECOMMENDATIONS AND PROJECT PHASING

### **Preservation Philosophy And Objectives**

The preservation philosophy and approach for the restoration of historic buildings follows The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (revised 1995). Four standards are identified in the Guidelines, Preservation, Rehabilitation, Restoration and Reconstruction. "Preservation" as determined in the Secretary's Standards is defined as "the act or process of applying measures necessary to sustain the existing form, integrity and materials of an historic property."

Our approach to any intervention for the buildings owned by the First Unitarian Society of Plainfield is as follows:

- Repair rather than replace damaged building materials when possible.
- Preserve all sound existing building fabric.
- Replace in kind all decayed and severely deteriorated building fabric.
- Acknowledge and respect the story of change to all buildings.
- Make any alteration or addition readily reversible.
- Treat or clean building materials carefully. Intervene only when necessary and in the least aggressive manner possible.
- Recognize the need to balance the cultural values with the socio-economic values of the site.

### **Objectives**

Striking the appropriate balance between necessary replacement to ease maintenance and ensuring long-term durability and the desire to retain the greatest amount of historic fabric is the most important challenge faced in the preservation of historic buildings. These recommendations strive to identify and prioritize the most appropriate intervention, to secure the building's long-term conservation and to respect the building's fabric and methods of construction.

Recommended treatments for this building are organized according to the format used by the Construction Specifications Institute (CSI), a construction industry standard. The divisions are summarized below:

<b><u>Division</u></b>	<b><u>Subject</u></b>
02	Site Work
03	Concrete
04	Masonry
05	Metals
06	Wood
07	Thermal and Moisture Protection
08	Doors and Windows
09	Finishes
10	Miscellaneous
15	Electric
16	Heating & Plumbing

## **Summary of Recommended Work**

In reviewing the conditions and scope of work necessary, HBA is recommending that three distinct phases be developed for the restoration of the First Unitarian Society of Plainfield.

This section is for planning purposes and should not be used to execute any construction work on the buildings. The purpose is to provide the Sanctuary administration with a set of prioritized recommendations for which an estimated construction budget can be developed.

The recommended phased work is outlined below. It is based on the architectural condition assessment work completed in Section IV by HBA, as well as condition assessments completed and included in the appendices Section VII by structural engineers, Robert Silman Associates, PC (Appendix C), stained glass consultants, Femenella & Associates, Inc. (Appendix E), and mechanical, electrical and plumbing engineers, Princeton Engineering Group, LLC (Appendix D). The basis for the prioritized recommendations also includes thought on phasing and logistics, as well as the level of urgency. Below is outlined a description of the phases and recommended work, which is followed by a series of annotated plans showing work by phase.

## **Generalized Descriptions of Phased Work**

**Immediate Work:** This represents work that is critical and should be completed as soon as possible (within the next two years) because it represents potential safety hazards to the general public. In addition the work recommended is designed to prevent rapid deterioration of building fabric.

**Mid-term Work:** This work is urgent, should be done without delay and completed within the next five years. Further delay could result in irreparable damage to the historic fabric.

**Long-term Work:** This work should be done in the near future within the next ten years in order to maintain the existing building fabric and is meant to assist the First Unitarian Society of Plainfield administration in anticipating future major capital restoration work for the property.

## **Phase I – Immediate Work**

The immediate work outlined below is also described on Drawing A-5.01:

### *02 Site Work*

- Install below grade drains around the perimeter of the buildings and connect them into the storm water drainage system for the City.
- Complete site regrading work to allow for proper drainage away from the perimeter of the building.
- Trim back the large trees adjacent to the buildings to prevent biological growth on roofs. In addition, trim back plants or remove them from areas adjacent to the building, especially adjacent to masonry. This should include all vines, as well as shrubs and planter boxes.
- Remove the Powell Terrace and wood ramp and restore the entrance steps having made repairs to the north foundation walls of the Sanctuary. The new entrance will be designed to be in keeping with the entrance shown in historic photographs.

- Install a new barrier-free access lift in the Library accessed from an exterior door on the north wall of the Library.
- Rebuild the basement light wells on the Stevens Wing along the West Elevation.

#### *04 Masonry*

- Rake out and repoint interior foundation walls of the Sanctuary. This should include 30% rebuilding of severely deteriorated masonry and deep pointing in these areas.
- Stabilize the masonry foundation wall along the South Elevation of the Sanctuary where settlement has been observed. Geotechnical investigation at this location is recommended to determine the substrate stability. In addition, this wall may require structural monitoring.
- Repair the stone knee walls at the two Sanctuary entrances, north porch and southeast porch to include 100% replacement of footings and rebuilding of knee walls, as well as temporary shoring and support of the north porch roof.
- Rebuild the steps at the two Sanctuary entrances with new.
- Restore the south, north, and east masonry elevations of the Sanctuary, including both masonry towers. Work to include: raking out and repointing of all masonry joints, removal of unstable stone, especially on the East Elevation, retooling of the stone surface as necessary, and cleaning of all masonry, including the removal of roofing tar and cement.
- Infill with masonry the basement opening below the Robinson window on the East Elevation to provide appropriate structural support.
- Restore north terrace on Stevens Room to include repair and rebuilding of brick perimeter walls and restoration of the slate terrace and steps.
- Install a new reinforced stainless steel lintel at the opening between the Parish Hall and the Sanctuary to support the masonry wall above.

#### *06 Wood*

- Repair and paint all wood trim on the Parish Hall where roof restoration work will occur.
- Repair all wood trim where pest infestation has occurred to prevent further pest access to the interior of the building.
- Install new floor framing along the south wall of Parish Hall offices (assume 50% new framing), and replace the rotten sill plate as necessary (assume 30% new).

#### *07 Thermal and Moisture Protection*

- Provide ventilation to the crawl space under the Parish Hall south addition.
- Remove the Parish Hall roof and install a new slate roof with all necessary flashing, including at chimney, ridge and valleys, as well as the connection with the asphalt shingle roof to the north of the Parish Hall. All flashing should be Terne Coated Stainless Steel (TCS) or lead coated copper (LCC). As this roof is concealed, an alternative option would be to install asphalt shingle.
- Install new flat pan metal roofs on the three dormers to the south and replace all flashing intersecting with the proposed new slate roof on the Parish Hall.
- Install a new flat pan metal roof at the roof junction between the Sanctuary and the flat roof to the south of the Parish Hall.
- Replace the flat roofs on the south additions of the Parish Hall with new EPDM roofs.
- Replace the northeast entrance Parish Hall flat roof with a new flat pan TCS or LCC roof.

- Include all wood trim restoration.
- Replace all downspouts and gutters on all buildings.

#### *08 Doors and Windows*

- Repair wood trim at original wood windows on the Parish Hall (W114 and W140).
- Restore all wood trim related to stained glass windows to be restored.
- Restore windows set out as Priority A in the Femenella & Associates stained glass recommendations.
- Restore basement windows along the foundation walls of the Sanctuary and along the West Wall of the Stevens Wing.

#### *15 Heating and Plumbing*

- Install a new combustion air supply for the Stevens Wing boilers.
- Install a forced air heater in the vestibule to replace the convector to provide greater heating capability.
- Replace the heating system controls for the classrooms with systems, which allow for automatic set back, such as local time clock digital thermostats. (The First Unitarian Society of Plainfield is currently doing this work.)
- Rotate the supply registers in the Parish Hall duct work to better distribute warm air in the space.
- Reconnect and extend storm drainage, as discussed above under Site Work.
- Inspect and maintain existing basement sump pumps, install an emergency battery for the sump pump.
- Upgrade plumbing fixtures for barrier-free accessibility.
- Replace all cracked and broken fixtures, including water closet lid in Girls toilet room.

#### *16 Electric*

- Replace all non-grounded electrical receptacles.
- Upgrade emergency lighting, as necessary by code.
- Replace all incandescent light fixtures with energy efficient fixtures with integral ballasts.
- Expand the fire alarm system to provide detection throughout the building, in particular the classrooms.

### **Phase II – Mid-Term Work**

The mid-term work outlined below is also described on Drawing A-5.02:

#### *02 Site Work*

- Continue to maintain all of the trees insuring proper trimming and removal of plant growth adjacent to the buildings.

#### *07 Thermal and Moisture Protection*

- Restore all the facades on the Parish Hall. Façade restoration to include: repair of wood shingles and restoration of all wood trim, including paint removal, priming and repainting.
- Remove existing asphalt shingle roofs on the Sanctuary. Install a new slate roof on the main Sanctuary roof, including the six dormers and dormer cheek walls. Roof work should include all flashing.

- Install new standing seam TCS or LCC roofs on the shallow pitched shed side aisle roofs to the north and south, as well as in concealed areas behind the octagonal projection roof.
- Restore the hip roof over the north porch and the hip roof over the northeast octagonal projection with new slate and flashing.
- Restore the historic finials at the gable ridge East Elevation, on the two towers, on the six dormers and on the north porch and north octagonal projecting roof above the Minister's office.
- Restore the tower roofs with new slate and exposed TCS flashing.

#### *08 Doors and Windows*

- Restore the dormer windows on the Parish Hall.
- Restore all stained glass windows identified as Priority B in Femenella & Associates, Inc. report.
- Restore all wood windows and trim on the Parish Hall elevations.
- Install interior storm windows for Minister's office.

#### *15 Heating and Plumbing*

- Install separate heating zones for the Minister's office in the northeast corner of the Sanctuary and for the Parish Hall offices.
- Replace all deteriorated sanitary piping, including worn drain traps under fixtures and upgrade lavatory waste and water piping.

#### *16 Electric*

- Replace all older electrical wiring, including all non-metallic jacketed wiring.
- Replace all lighting in corridors, classrooms, and the basement with more energy efficient fixtures.

### **Phase III – Long-Term Work**

The long-term work outlined below is also described on Drawing A-5.03:

#### *02 Site Work*

- Continue to maintain all below grade site drainage to make sure it is fully operational and that all areas are draining away from the building perimeter.
- Continue to maintain and cut back all tree foliage adjacent to the buildings.
- Continue to monitor all pest infestation into the buildings to prevent access.

#### *07 Thermal and Moisture Protection*

- Continue to maintain the gutters and downspouts and insure that they are cleaned annually.
- Paint all shingle siding, including proper preparation and paint removal at the Stevens Wing north, west and east elevations.
- Replace asphalt shingle roofs on the Stevens Wing, including the Stevens Room and the link to the Parish Hall.
- Replace all related flashing, including ridge and eaves and at the slate roof connection to the Parish Hall.

#### *08 Doors and Windows*

- Restore the Stevens Wing windows and doors on all elevations.
- Restore stained glass windows listed as Priority C in the Femenella & Associates, Inc. recommendations.
- Install new lead came windows in the Minister's office to replicate the historic windows previously removed.

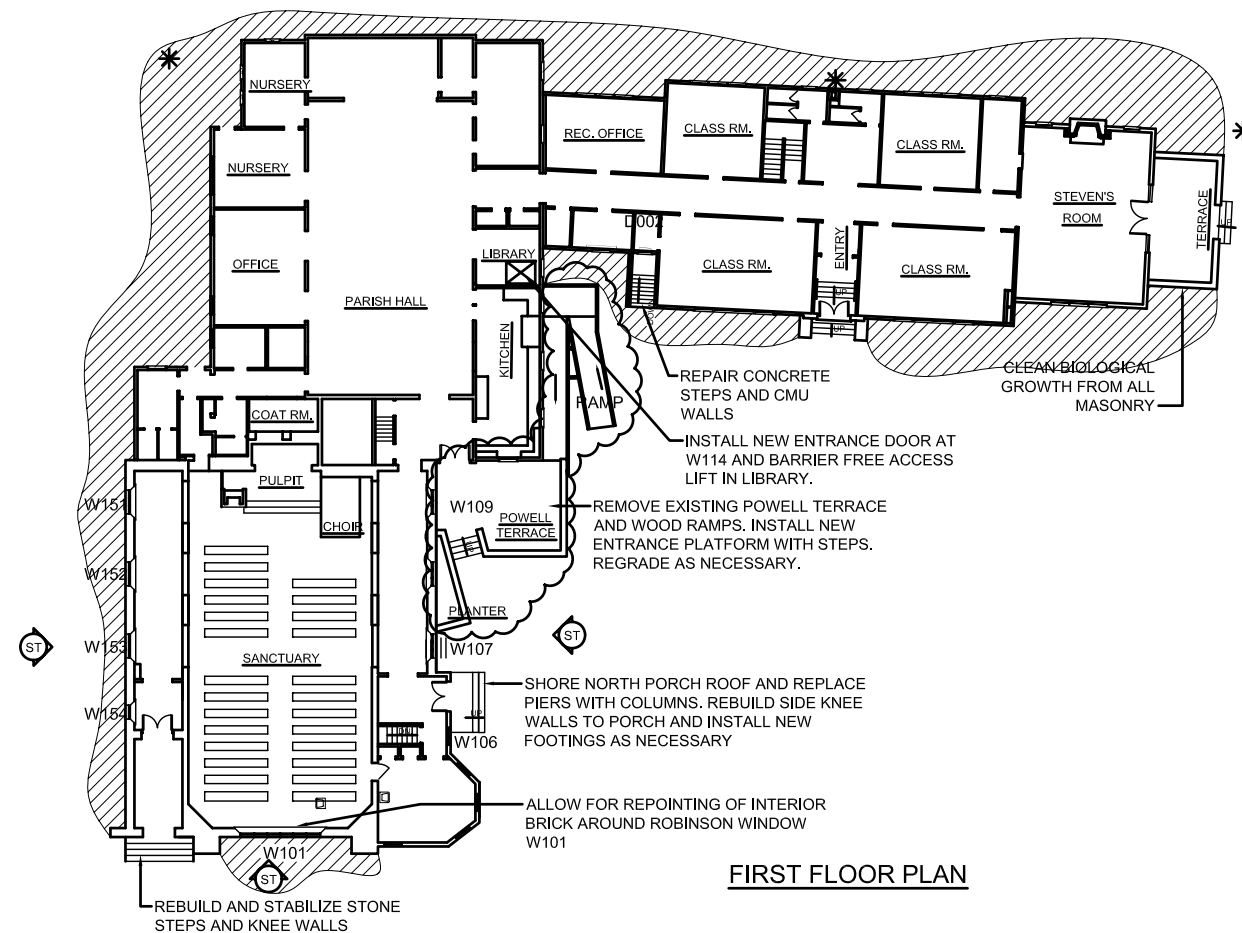
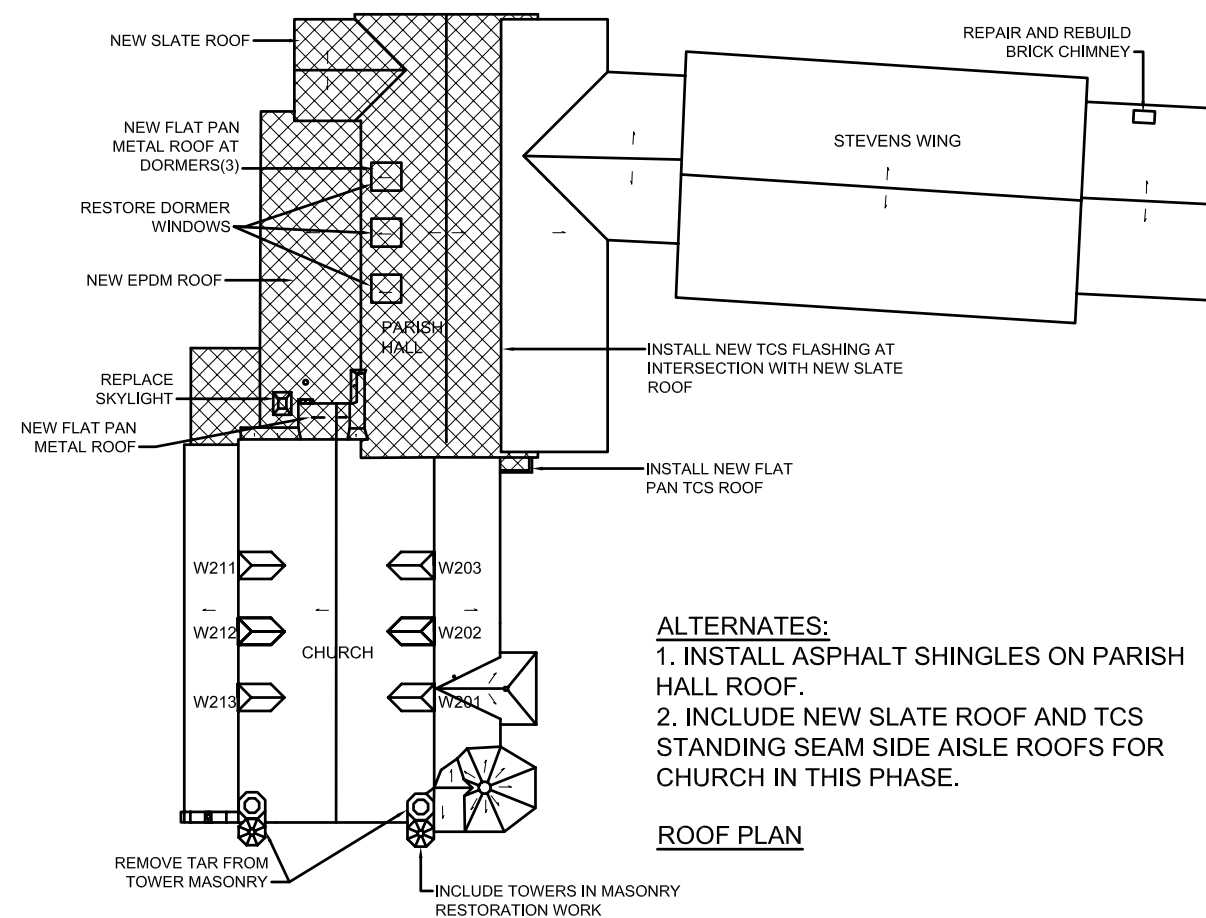
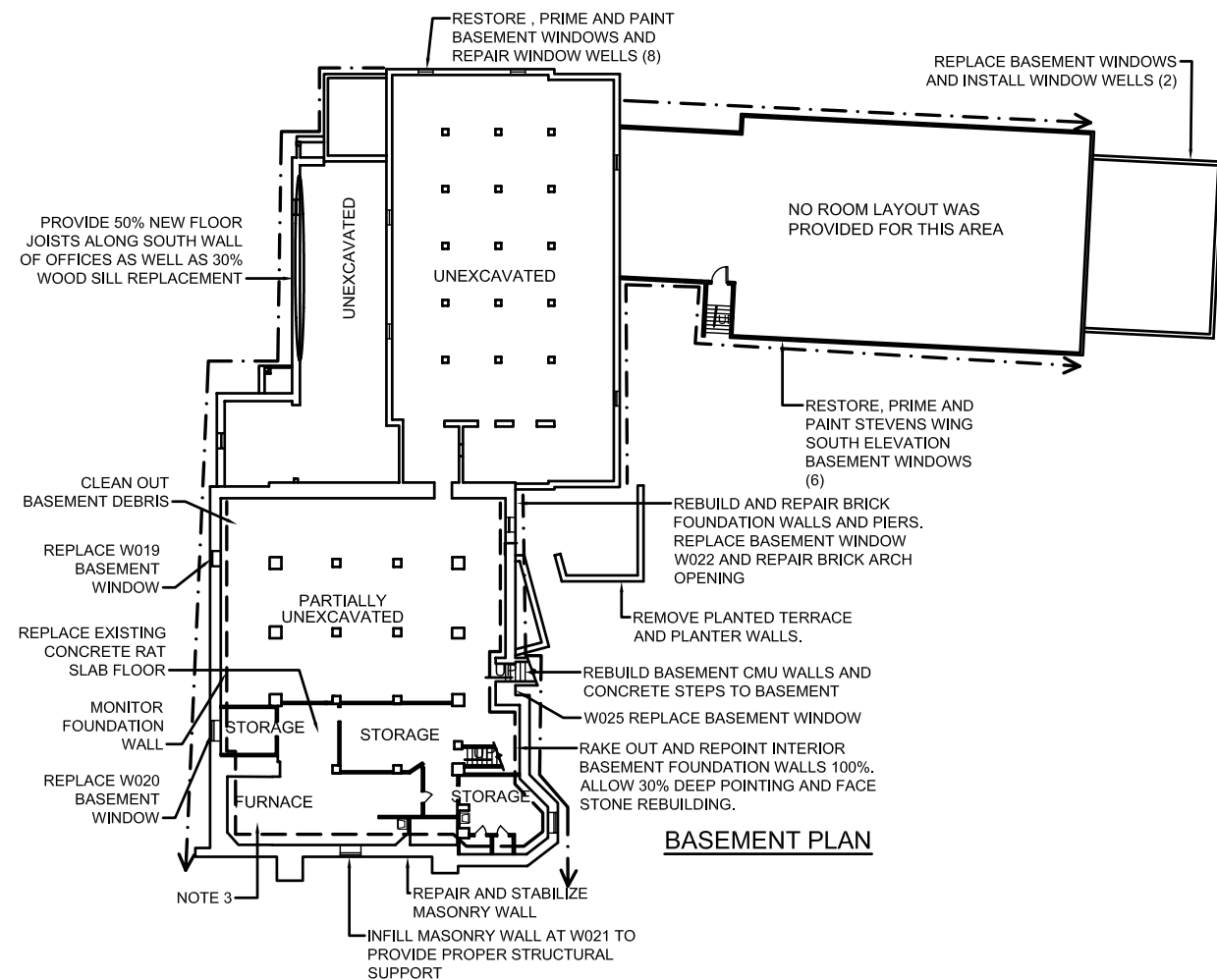
#### *15 Heating and Plumbing*

- Install a direct digital control system for HVAC in all buildings to allow for energy efficient operation.
- Install air conditioning in the Stevens Room.
- Install air conditioning using a central system for all the classrooms in the Stevens Wing to allow for greater use. This would be dependent on a tenant occupying this place.
- Investigate alternative means of cooling and heating, which are cost-effective and environmentally sustainable. One option is geothermal systems.

Note: The current boiler system is 20 years old and the current hot water heater is 12 years old. Planning for new upgraded/replacement systems should begin to be designed in the mid-term phase.

#### *16 Electric*









- Upgrade of electrical service to allow for heating and cooling upgrades.



NOTES:

1. DOWNSPOUTS: INSTALL ALL NEW AND CONNECT TO NEW BELOW GRADE DRAINAGE.
2. INSTALL NEW GUTTERS THROUGHOUT. USE TCS ON CHURCH AND PARISH HALL. USE ALUMINUM ON STEVENS WING.
3. ALLOW FOR REPAIR OF FLOOR JOIST FRAMING AT STONE FOUNDATION WALL AT FOUR LOCATIONS IN CHURCH BASEMENT.
4. REMOVE PLEXIGLASS FROM ALL WINDOWS AND STAINED GLASS.
5. REPLACE 2 DOORS ON PARISH HALL.

KEY:

-  CUT BACK LARGE OVERGROWN TREES AND MAINTAIN AWAY FROM BUILDING. SHOWN ON FIRST FLOOR PLAN.
-  INTERIOR - RAKE OUT AND REPOINT MORTAR JOINTS IN FOUNDATION STONE AND/OR BRICK WALLS. ALLOW FOR 30% DEEP POINTING AND REBUILDING OF FACE STONE.
-  RESTORE WOOD SHINGLE FACADE. STRIP ALL PAINT, REPLACE ALL ROTTEN SHINGLES, PRIME AND PAINT.
-  RESTORE STONE ELEVATION TO INCLUDE: RAKE OUT AND REPOINTING OF MORTAR JOINTS. RETOOLING OF STONE FACE TO REMOVE UNSTABLE EXFOLIATING STONE. CLEAN MASONRY.
-  REGRADE TO PROVIDE GRADED SLOPE AWAY FROM BUILDING PERIMETER. REMOVE ALL ROOTS AND LOW LEVEL PLANT GROWTH. SHOWN ON FIRST FLOOR PLAN. PROVIDE ARCHEOLOGY AS REQUIRED BY NJHT.
-  REPAIR OR INSTALL NEW BELOW GRADE DRAINS AND CONNECT INTO CITY STORM DRAINAGE. SHOWN ON BASEMENT PLAN.
-  STAINED GLASS WINDOWS TO BE RESTORED EITHER IN FULL OR PARTIAL RESTORATION AS PART OF THIS PHASE. REFER TO ART FEMENELLA AND ASSOCIATED REPORT.
-  ROOF RESTORATION: REMOVE EXISTING ROOF AND INSTALL NEW. REPLACE ALL EXISTING FLASHING WITH NEW LCC OR TCS.

Preservation Plan  
**First Unitarian Society of Plainfield**  
724 Park Avenue  
Plainfield, New Jersey 07060

## Phase 1 - Immediate Work

Scale: NTS

Drawn by:  
CB/AJ

Date: 02/24/08

# Historic Building Architects, LLC

3312 West State St. Trenton, NJ 08618 TEL 609 393 3999 FAX 609 393 4333  
Certificate of Authorization # AC 245 Expires 01/31/2008

Certificate of Authorization # AC 245 Expires 01/31/2008

ANNABELLE RADCLIFFE-TRENNER R.A. NJ# AI 13776

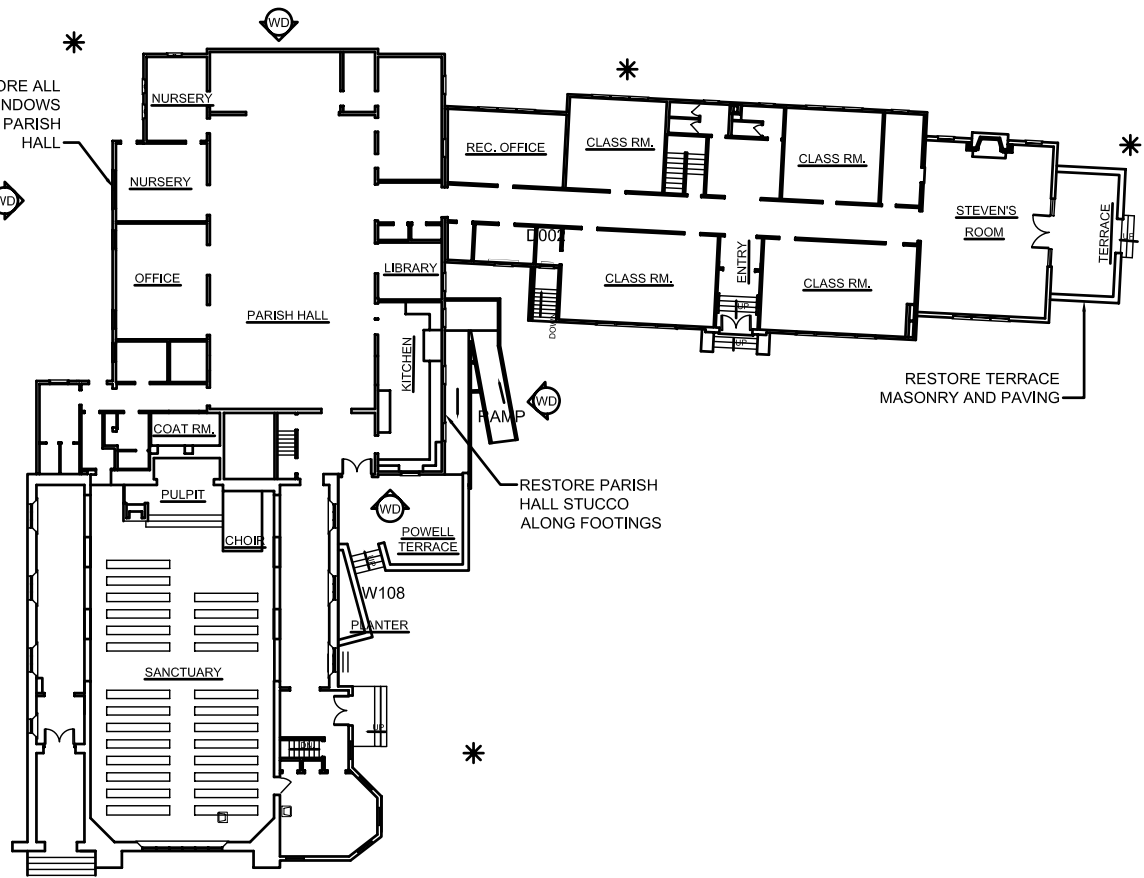
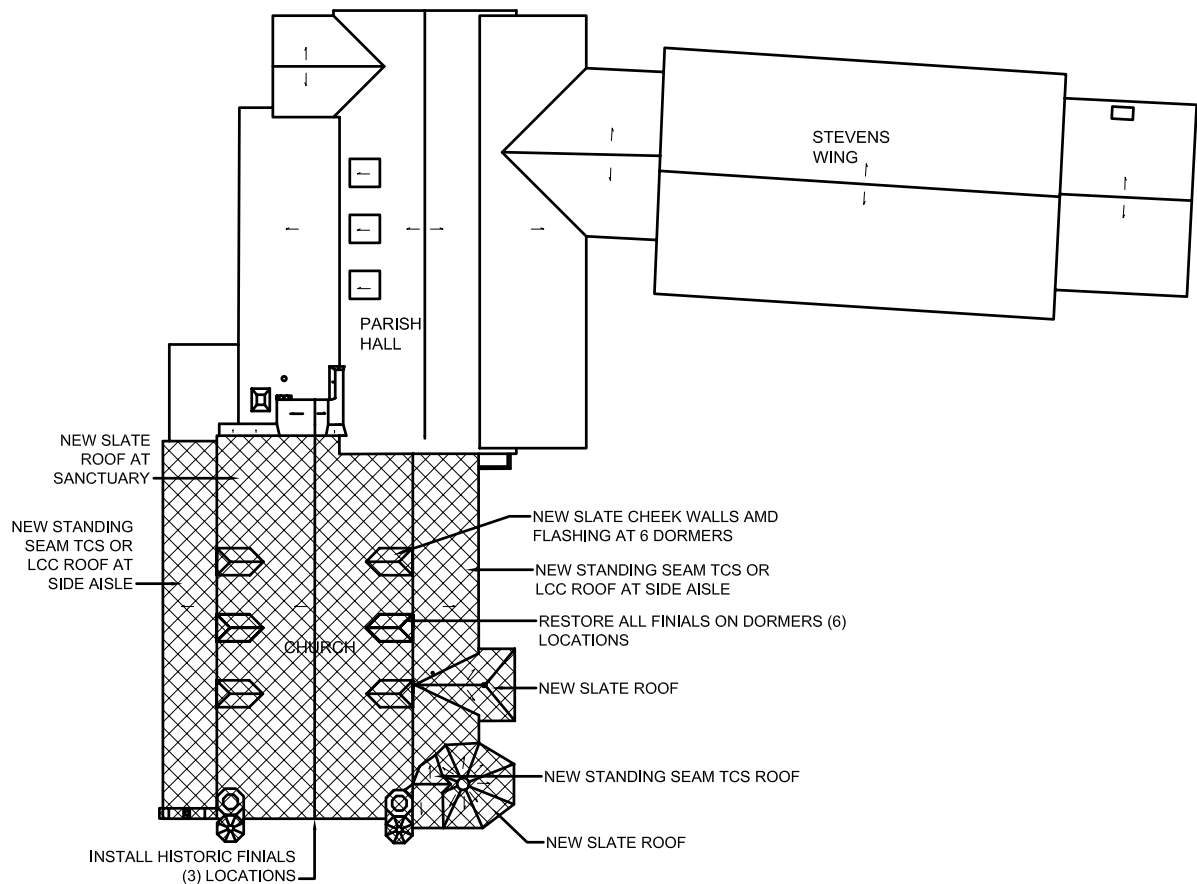
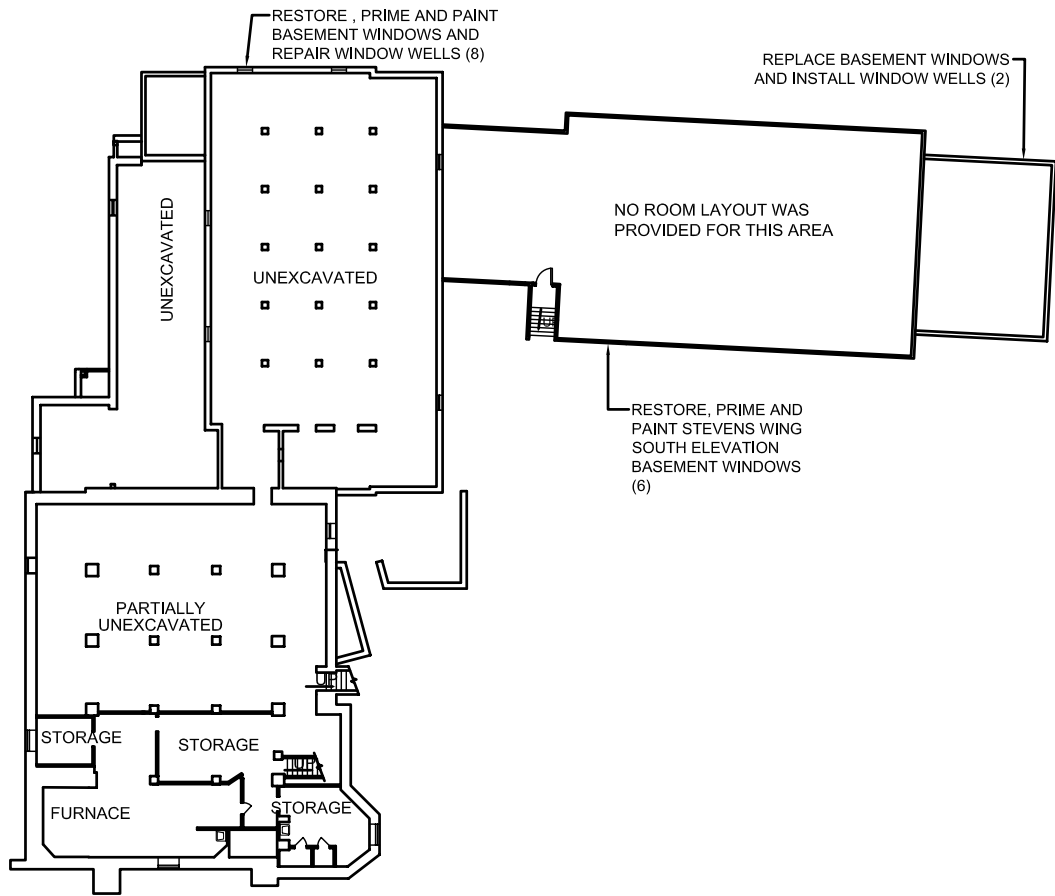
ANNABELLE RADCLIFFE-TRENNER R.A. N

Revisions &amp; Submissions Date

te

## A-5.01





NOTES:

1. STRIP, PRIME AND PAINT ALL PARISH HALL WINDOWS NOT COMPLETED IN PHASE 1.

KEY:

\* CUT BACK LARGE OVERGROWN TREES AND MAINTAIN AWAY FROM BUILDING. SHOWN ON FIRST FLOOR PLAN.

--- INTERIOR- RAKE OUT AND REPOINT MORTAR JOINTS IN FOUNDATION STONE AND/OR BRICK WALLS. ALLOW FOR 30% DEEP POINTING AND REBUILDING OF FACE STONE.

WD RESTORE WOOD SHINGLE FACADE. STRIP ALL PAINT, REPLACE ALL ROTTEN SHINGLES, PRIME AND PAINT.

ST RESTORE STONE ELEVATION TO INCLUDE: RAKE OUT AND REPOINTING OF MORTAR JOINTS. RETOOLING OF STONE FACE TO REMOVE UNSTABLE EXFOLIATING STONE. CLEAN MASONRY.

REGRADE TO PROVIDE GRADED SLOPE AWAY FROM BUILDING PERIMETER. REMOVE ALL ROOTS AND LOW LEVEL PLANT GROWTH. SHOWN ON FIRST FLOOR PLAN. PROVIDE ARCHEOLOGY AS REQUIRED BY NJHT.

→ INSTALL NEW BELOW GRADE DRAINS AND CONNECT INTO CITY STORM DRAINAGE. SHOWN ON BASEMENT PLAN.

W## STAINED GLASS WINDOWS TO BE RESTORED AS PART OF THIS PHASE. REFER TO ART FEMENELLA AND ASSOCIATED REPORT.

ROOF RESTORATION: REMOVE EXISTING ROOF AND INSTALL NEW. REPLACE ALL EXISTING FLASHING WITH NEW LCC OR TCS.



Revisions & Submissions	Date

Preservation Plan  
**First Unitarian Society of Plainfield**  
724 Park Avenue  
Plainfield, New Jersey 07060

Phase II- Mid- Term Work

ANNABELLE RADCLIFFE-TRENNER, R.A., N.J.# AI 13776  
MICHAEL CALAFATI, R.A., N.J.# AI09029

**Historic**  
Building Architects, LLC

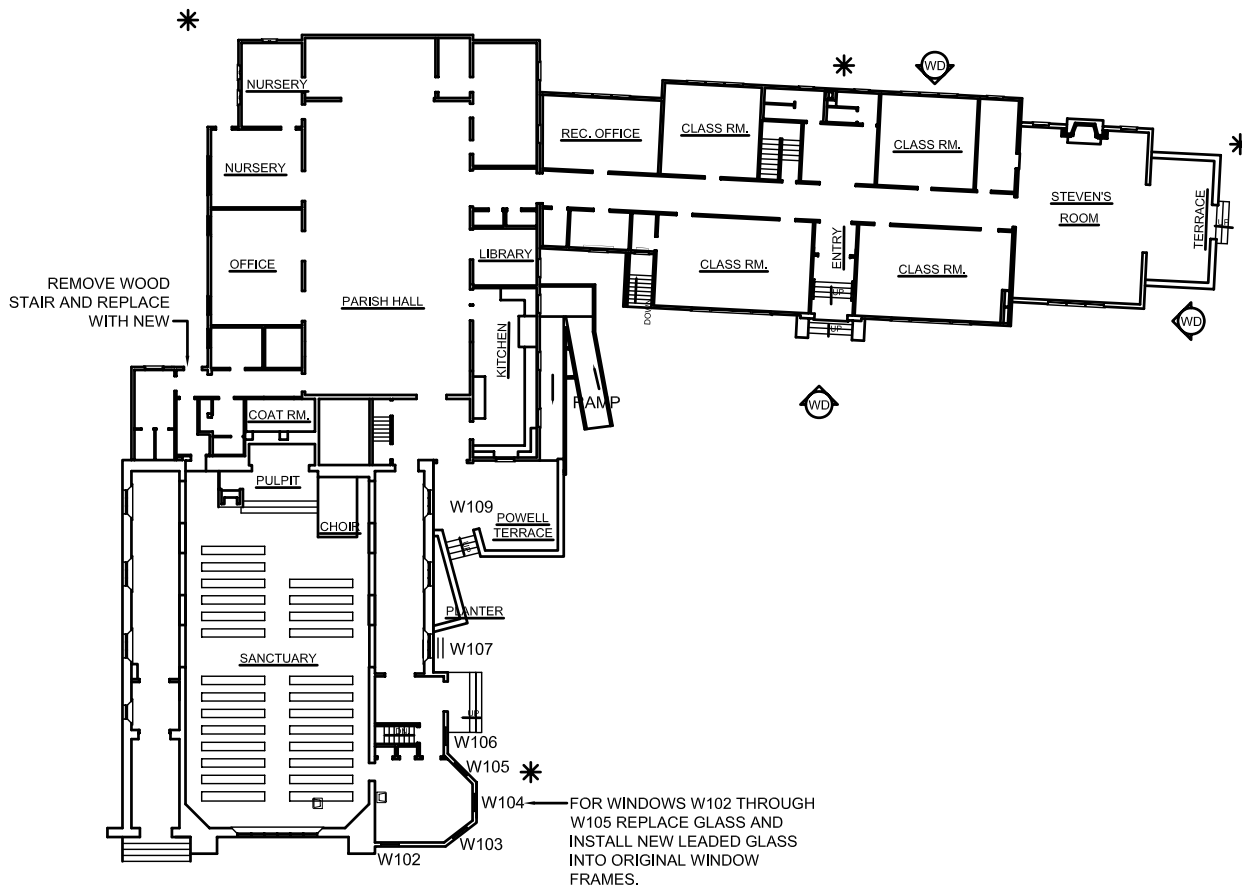
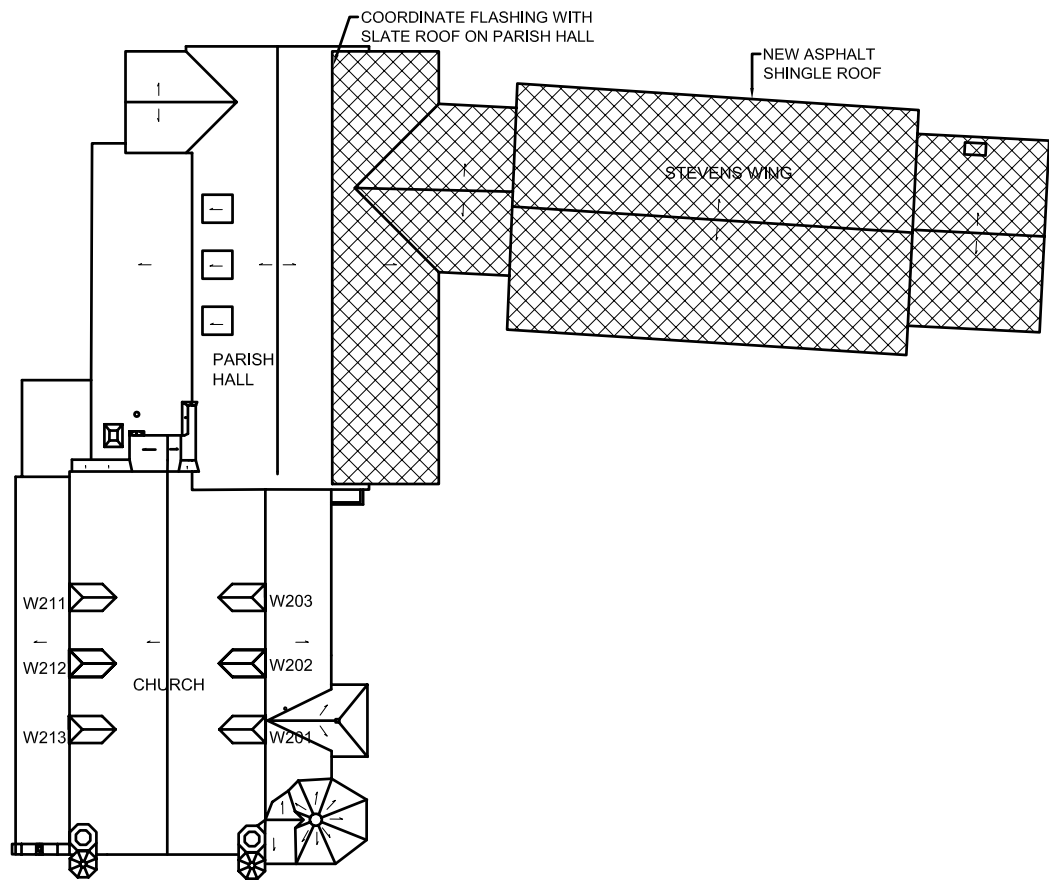
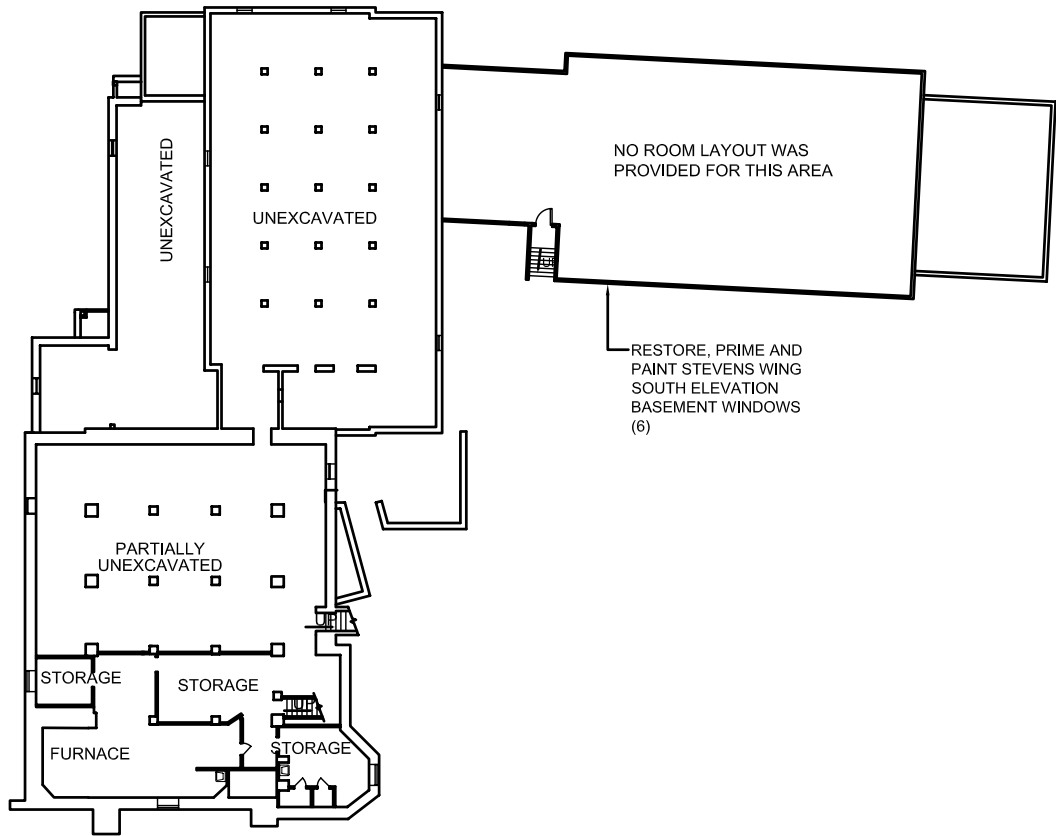
312 West State St. Trenton, NJ 08618 TEL 609 393 3999 FAX 609 393 4333  
Certificate of Authorization # AC 245 Expires 01/31/2008

Scale: NTS

Drawn by: CB/AJ

Date: 02/24/08

A-5.02



**GENERAL NOTES:**

1. DOWNSPOUTS: INSTALL ALL NEW AND CONNECT TO NEW BELOW GRADE DRAINAGE.
2. INSTALL NEW GUTTERS THROUGHOUT. USE TCS ON CHURCH PARISH HALL. USE ALUMINUM ON STEVENS WING.
3. REMOVE CONTEMPORARY CONCRETE SIDEWALK ADJACENT TO CHURCH AND INSTALL BLUESTONE.

**KEY:**

- \* CUT BACK LARGE OVERGROWN TREES AND MAINTAIN AWAY FROM BUILDING. SHOWN ON FIRST FLOOR PLAN.

- — — INTERIOR- RAKE OUT AND REPOINT MORTAR JOINTS IN FOUNDATION STONE AND/OR BRICK WALLS. ALLOW FOR 30% DEEP POINTING AND REBUILDING OF FACE STONE.

- WD RESTORE WOOD SHINGLE FACADE. STRIP ALL PAINT, REPLACE ALL ROTTEN SHINGLES, PRIME AND PAINT.

- ST RESTORE STONE ELEVATION TO INCLUDE: RAKE OUT AND REPOINTING OF MORTAR JOINTS. RETOOLING OF STONE FACE TO REMOVE UNSTABLE EXFOLIATING STONE. CLEAN MASONRY.

- REGRADE TO PROVIDE GRADED SLOPE AWAY FROM BUILDING PERIMETER. REMOVE ALL ROOTS AND LOW LEVEL PLANT GROWTH. SHOWN ON FIRST FLOOR PLAN. PROVIDE ARCHEOLOGY AS REQUIRED BY NJHT.

- . . . → INSTALL NEW BELOW GRADE DRAINS AND CONNECT INTO CITY STORM DRAINAGE. SHOWN ON BASEMENT PLAN.

- W## STAINED GLASS WINDOWS TO BE RESTORED AS PART OF THIS PHASE. REFER TO ART FEMENELLA AND ASSOCIATED REPORT.

- ROOF RESTORATION: REMOVE EXISTING ROOF AND INSTALL NEW. REPLACE ALL EXISTING FLASHING WITH NEW LCC OR TCS.



Revisions & Submissions	Date

Preservation Plan  
**First Unitarian Society of Plainfield**  
724 Park Avenue  
Plainfield, New Jersey 07060

Phase III Long Term

Scale: NTS

Drawn by: CB/AJ

Date: 02/24/08

**Historic Building Architects, LLC**

312 West State St. Trenton, NJ 08618 TEL 609 393 3999 FAX 609 393 4333  
Certificate of Authorization # AC 245 Expires 01/31/2008

ANNABELLE RADCLIFFE-TRENNER, R.A. N.J.# AI 13776  
MICHAEL CALAFATI, R.A. N.J.# AI09029

A-5.03